

The following is the Consumer Confidence Report on the quality of potable water at McClellan AFB. The Introduction is mandated text that applies to all drinking water sources followed by the McClellan site specific information of what is monitored and the frequency, key terms and acronyms, and the table of the results for Wherry and Capehart housing.

1999 Consumer Confidence Report

McClellan AFB

Introduction

EPA Required Comments:

This is an annual report on the quality of water delivered by McClellan AFB. Under the "Consumer Confidence Reporting Rule" of the federal Safe Drinking Water Act (SDWA), community water systems are required to report water quality information to the consuming public. Presented in this report is information on the source of our water, its constituents and the health risks associated with any contaminants.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems. (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Nitrate in drinking water at levels above 10 ppm (equal to 10,000 parts per billion (ppb)) is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

McClellan Comments:

McClellan AFB continually monitors its drinking water for contaminants. Our water is safe to drink. At McClellan AFB we have two separate water distribution systems, main base and the Capehart housing areas. For the main base the drinking water source comes from a deep groundwater well, well 10 and the Northridge Water District. The Capehart housing area uses three groundwater wells which include wells C-1, C-2, and C-3. These three wells are used, one at a time on a rotating basis. Water treatment for all wells consists of chlorination and fluoridation.

The Monitoring of Your Drinking Water

For McClellan AFB, we monitor for the following required contaminant groups using EPA approved methods. The frequency of monitoring is listed below.

Analyte Groups and Monitoring Frequency

Analyte/Contaminant Group	Monitoring Frequency	
	<u>On-base</u>	<u>Capehart</u>
Bacteriological	Weekly	Weekly
Organic Chemicals	Quarterly	Quarterly
Inorganic Chemicals	Annually	Quarterly
Fluoride and Chloride	Weekly	Weekly
Radiological	Monthly	4 years

Definition of Key Terms and Acronyms

ND	Non Detected
NR	Not Regulated, no recommended MCL
MCL	Maximum Contaminant Level; the highest level of a contaminant that is allowed in drinking water. MCL is the drinking water standard set by the Federal Safe Drinking Water Act.
MCLG	Maximum Contaminant Level Goal; the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG allow for margin of safety.
TT	Treatment Technique, which is a required process intended to reduce the level of contaminants in drinking water.
AL	Action Level, the concentration of a contaminant which, if exceeded, trigger treatment or other requirements which a water system must follow.
ppm	parts per million. It is a unit of measure equivalent to a single penny in \$10,000.
ppb	parts per billion. It is a unit of measure equivalent to a single penny in \$10,000,000.
mg/kg	milligrams per kilogram; a unit of measure equivalent to part per million (ppm)
ug/L	microgram per liter; a unit of measure equivalent to part per billion (ppb)
mrem/yr	millirem per year; a measure of radioactivity in water
mg/L	milligram per liter; a unit of measure equivalent to part per million (ppm)
MFL	million fibers per liter; a measure of asbestos in water
CCR	Consumer Confidence Report
SDWA	Safe Drinking Water Act; Federal law which mandates drinking water regulations
pCi/L	picocuries per liter; a measure of radioactivity
NTU	nephelometric turbidity unit; a measure of turbidity in water
TTHM	total trihalomethanes; by-products of drinking water disinfection by chlorine
Range	the range of the highest and lowest analytical values of a reported contaminant
pH	measure of acidity/basicity based on content of hydrogen ions in solution; a value of 7.0 is neutral

RESULTS TABLES

The following tables present the results of our monitoring for the past year. Only the contaminants that were detected are listed. None of the contaminants exceeded the Maximum Contaminant Levels set by the Safe Drinking Water Act. The results for Wherry and Capehart housing are listed separately. The data is in parts per billion.

Wherry Drinking Water - 1999

Contaminant	MCL* (parts per billion)	Concentration Found (parts per billion)	Exceeded Standard	Likely Source of Contaminant
Barium (Ba)	1,000	87	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Calcium (Ca)	NR	25,000	No	Naturally occurring
Magnesium (Mg)	NR	19,000	No	Naturally occurring
Potassium (K)	NR	2,100	No	Naturally occurring
Sodium (Na)	NR	20,000	No	Naturally occurring
Sulfate (SO ₄)	NR	7,500	No	Naturally occurring
Chloride (Cl)	NR	34,000	No	Naturally occurring
Fluoride (F)	4,000	2,100	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrates (NO ₃)	45,000	7,100	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Alkalinity (CaCO ₃)	NR	120,000	No	Naturally occurring
Hardness	NR	140,000	No	Naturally occurring
Total Dissolved Solids (TDS)	500,000	200,000	No	Naturally occurring
pH	6.5-8.5	7.0	No	Naturally occurring
Tritium	20,000	1340 - 1600	No	Decay of natural and man-made deposits
Radiation Gross Alpha	15 pCi/L	1.4 - 2.0	No	Erosion of natural deposits
Radiation Gross Beta	50 pCi/L	2.6 - 4.1	No	Decay of natural and man-made deposits

Capehart Drinking Water - 1999

Contaminant	MCL* (parts per billion)	Concentration Found (parts per billion)	Exceeded Standard	Likely Source of Contaminant
Trihalomethanes	100	ND-1.9	No	By-product of drinking water chlorination
Chloroform	100	ND-1.7	No	By-product of drinking water chlorination
Bromodichloromethane	NR	ND-0.63	No	By-product of refrigerant or fumigant
Arsenic (As)	50	3.1-4	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (Ba)	1000	67-84	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Calcium (Ca)	NR	17,000-22,000	No	Naturally occurring
Chromium (Cr)	50	11-13	No	Discharge from steel and pulp mills and chrome plating; Erosion of natural deposits
Copper (Cu)	1000	ND-260	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Magnesium (Mg)	NR	12,000-16,000	No	Naturally occurring
Potassium (K)	NR	1,100-1,200	No	Naturally occurring
Sodium (Na)	NR	17,000-20,000	No	Naturally occurring
Zinc (Zn)	5,000	10-11	No	Naturally occurring
Chloride (Cl)	NR	29,000-32,000	No	Naturally occurring
Fluoride (Fl)	4,000	2,100-2,300	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrates (NO3)	45,000	7,600-8,000	No	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits
Sulfate (SO4)	NR	4,700-4,800	No	Naturally occurring
Alkalinity (CaCO3)	NR	83,000-100,000	No	Naturally occurring
TDS	500,000	150,000-200,000	No	Naturally occurring
Hardness	NR	95,000-120,000	No	Naturally occurring
pH	6.5-8.5	7-7.2	No	Naturally occurring
Turbidity	NR	.45-.5	No	Naturally occurring
Radiation Gross Alpha **	15 pCi/L	0.6 - 1.4	No	Erosion of natural deposits

* MCL is the maximum concentration limit

NR = not regulated

ND = non-detected

** Most recent data was collected in 1996